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## Feasibility Study of a Maritime Business Start-up

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FEASIBILITY STUDY  
OF A STARTUP BUSINESS IN THE MARITIME INDUSTRY

ABSTRACT

This study sought to determine the feasibility of operating a business as represented by the proposed Sunset Cruises. The minimum acceptable standards of performance established by the entrepreneur are defined as follows:

- \* The vessel must be U. S. flagged.
  
- \* The business must operate entirely within the existing laws and regulations as set forth by government agencies and must meet or exceed the standards of performance and conduct as set forth by professional relevant organizations (ie: The American Society of Travel Agents, The Cruise Line International Association, and the conventions of the Certified Accounting Practices).
  
- \* The return on investment must be no less than five percent during each of the years during which capital debt is carried. The cost of debt service is to be computed as an expense and all loan proceeds are to be computed as investment.

\* Ancillary services are to be considered as "standalone" functions and do not impact on the cruise generated income.

Having given consideration to the mandated standards of performance requirements and the analysis of the financial projections, I would judge this project as not feasible. The requirements of the U.S. flagging policy necessitates burdensome costs associated with modifications, crewing, scheduling, and most restricting, finance and investment. The marketing program, the company structure, and the growth strategy are all sound in practice and lay the foundation for a viable venture; however, the entrepreneur's insistence on flagging the vessel U.S. is the single debilitating factor in this finding of not feasible. This inability to operate a business in the maritime industry indicates a major weakness for a maritime nation which adversely impacts that nation's overall national security.

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# **Feasibility Study of a Maritime Business Start-up**

**Lieutenant Colonel  
Bradley M. Lott  
U.S. Marine Corps**

***Faculty Research Advisor*  
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### SCOPE AND LIMITATIONS

The feasibility of any business in the maritime industry depends heavily on the climate established by government incentives and regulation. Sunset suggests that they can offer a contribution to the national defense through two avenues--use of the vessel by the military and providing vacancy in the waterfront structure during times of military necessity. The scope of this study will be limited to the feasibility of the business and will not probe the issue of military utility of the venture; however, I would like to quote Alfred Thayer Mahan who once wrote "Sea power in the broad sense...includes not only the military strength afloat, that rules the sea or any part of it by force of arms, but also the peaceful commerce and shipping from which alone a military fleet naturally and healthfully springs, and on which it securely rests." The impact of successful maritime businesses is of importance to national security in more ways than transportation of military cargo to an operational commitment. The infrastructure of the waterfront, that is the intermodal equipment, the materiel handling equipment, the multi-mode terminals, the coastal movement, port authorities, etc., all must be mutually supporting of the national economy in order to ensure their readiness to mobilize with the rest of the nation in support of a threat to our national interests. The contribution of a minor passenger vessel to national security is vague at

best; however, I support the contention that the network of chandleries, port support capabilities, ship repair and maintenance yards, and qualified crews contributes to the daily success of the maritime industry. Further, that during time of crisis, such a minor ship can offer either the use of the vessel in an active support role or can offer the crew in active support of larger vessels. The supporting activities and their schedules can also be offered as availabilities without competition.

Therefore, this feasibility study will examine a potential start-up business in the passenger recreation cruise industry with consideration given to the incentives and regulations that support or restrict the industry but without direct study and consideration of the military utility of the venture. The evaluation is being done without any preconceived notions regarding the issues of government subsidies for construction and operation or about the restrictions associated with the flagging a vessel under the U.S. flag.

### ASSUMPTIONS

There is an assumption in this study that the vessel is available, the funding is available at rates not to exceed the projections, and that surveys and trials have been favorable. I will further make the assumption that incentives and regulations will remain constant or change only on the currently known schedule. Major policy changes under the new administration seem unlikely, especially considering the emphasis on budget cuts.

## INTRODUCTION

The proposed business was examined and its feasibility analyzed and described in the following summary.

Sunset Cruises proposes to operate a U.S. built passenger ship between the ports of San Diego, Catalina, and Ensenada (Mexico). Consideration has been given to both construction of a new vessel and acquisition of an existing one. Construction of a new vessel for this project received no benefit from any government programs and the cost, both in terms of time and dollars, directed the owners' attention to the acquisition of an existing vessel with the intention of modifying it to meet his requirements. This appears to be a prudent decision. In order to ensure future flexibility and maintain a competitive edge, the vessel will be a U.S. flagged ship, thereby permitting successive U.S. port calls where passengers can board. The ship will make two weekly trips under a schedule which provides for an "eight day week". The capability to modify the schedule to accommodate charters is a feature not found on other cruise ships. This flexibility will permit Sunset to pursue the charter and convention business both as a convention site and as a feature of a convention based ashore. For this business, the maintenance of U.S. flagging is of significant importance to the reputation of the company in the marketplace in addition to the importance of future flexibility. Last year a bill known as the "Americanization of Cruises-to-Nowhere Bill" passed the House but was held up in the Senate and will have to be reintroduced this year. The impact of the bill passing would be preclusion of any foreign

flag vessel from pursuing convention cruises, speciality charters, and circuitous routes with successive U.S. ports of call. Sunset would benefit from passage of this bill under their current mandate to flag U.S.

#### SUCCESS FACTORS

General P.H. Sheridan of the Union Army spoke of success that "the surest way not to fail is to determine to succeed". Sunset Cruises is postured for success as the result of careful planning in all aspects of the business, they have developed stringent operational and financial controls, have carefully planned for the daily routine, and considered options for contingencies. Basic and prudent business practices assure a solid steady start and establish a firm base upon which to build a viable company. No other cruise line in Southern California offers the schedule or the flexibility of Sunset. That will be this venture's key ingredient to success of the concept.

The most important consideration in this business is the passenger. If the prevailing theme is passenger satisfaction, and Sunset can convey their loyalty and integrity to the guests, then they will likely achieve a passenger return rate of 70% by their fourth year. 70% is the industry goal achieved by only the top lines who have been in business for many years. In evaluating the economic factors of success in this venture, this passenger return rate will play a significant role in the projected sales figures.

## MANAGEMENT

Once the vessel is underway, operational management responsibilities pass to the ship's master who executes the orders of the Managing Director and enforces the general policies established by the Board of Directors. The master will be selected from applicants who have responded to inquiries to the union, as well as those who have been individually sought. The master will possess the requisite seamanship skills and will have a clear record of performance with his past employers and the Coast Guard. His managerial skills will be equal to his seamanship skills. The industry standard for masters is to contract for a specific trip or for a specific period of time. Most masters are at sea for months at a time. Sunset plans to use two masters who will command on alternate cruises, thereby eliminating the loss of continuity with the expiration of a contract. In addition, they will be able to attract qualified semi-retired applicants or retired U.S. Navy and Coast Guard officers who do not want to return to the sea for months at a time. The majority of the crew would follow the same general schedule.

## GROWTH STRATEGIES

The vessel is limited by the number of available berths; therefore, initial growth must be viewed in terms of ancillary services such as tours, conventions, associated ticketing, bar sales, duty free sales, memento sales and casino operations.

However, in accordance with the standards of performance to determine the feasibility of this project, ancillary services will not be further explored, considered, or evaluated. Future growth strategies include acquiring a sister vessel with emphasis on the tailored cruise. The key to growth is controlled, stable expansion within the capabilities of finance, management, personnel, and facilities.

The Jones Act is a provision of protection for U.S. operators and builders whereby vessels making consecutive U.S. port calls must be U.S. flagged and U.S. built. Current Jones Act criteria favors this project and the proposed growth strategy; however, under the unlikely scenario that the Act is repealed or amended, foreign flag advantages in vessel acquisition, operation, and crewing would necessitate that future growth deviate from the company policy of flagging U.S.



## INDUSTRY BACKGROUND

The preponderance of this section will be quoted or paraphrased from an article written by Frank O. Braynard and published in the Maritime Reporter/Engineering News, February, 1987. In his work, Mr. Braynard has quoted from personal interviews the comments of more than eighteen cruise ship and travel executives. Where appropriate, credits for specific comments will be made.

"Today the cruise ship era seems to be at its beginning. The old era of 'ocean liners' has been overtaken by the new age of recreational cruises. To better predict the market future of the cruise industry one must only look overseas. Europeans have maximized the use of their coastal, intercostal, and inland waterways. A look at the neglected status of our coastlines is a clue to the potential for a coastal cruise venture".

For those who bemoan the fall of the old liner industry, Mr. Braynard asks "Is there a lack of initiative in rediscovering old passenger routes now dormant plus a lack of imagination in marketing techniques?" The operative words in this question are initiative and imagination. Rather than listen to the prophecies of failure of the past liners, it seems that the cruise industry should be praised for having been able to face and overcome one of the toughest problems ever encountered in the history of the industry. In 1986, amidst the highly publicized terrorism in the Mediterranean, the industry experienced virtual elimination of the cruise business in that area. The companies displayed creativity, imagination, and initiative; sought routes elsewhere, and

merchandised them successfully. Many of these companies turned to the source of there old passengers--America! The same potential exists for other areas of this country besides the East Coast, the Caribbean, and the Gulf of Mexico. As the American tourist is "brought home" the potential to lure the European and the Far East tourist is high as the dollar continues to decline. Mr. Braynard points out that he has "personally scoured, without success, the racks of travel agents throughout Europe to find information on cruises out of American ports." He also asks how many American cruise operators have marketed to the Japanese travelers either in Japan or in conjunction with a trip to America.

Braynard further states, "One of the biggest bits of good news for the future in cruising out of America is the development of the very short cruise. Cruises to nowhere, the one, two, and three night cruises are bringing many new people into the cruise family. More attention here might be given to family cruises of short duration, and less to 'party cruises'. When the short or 'mini cruise' was proposed years ago, the port captains of most lines protested bitterly that any income would be used up paying tug bills, long-shoremen, and pilots. Today several lines are in this field and making money. The theme cruise is another idea often called new which is doing well today."

The key to the success of these operations is the size of the vessel and the self sustainability in port as well as under-way. New thinking in routes, types of service offered, and areas of the public to be served are vital to the company with the will to survive and grow.

"The population is growing older and, among middle and upper-middle class people, richer. Thus, more people have become disposed to sedentary vacations like taking a cruise. By the

year 2020 perhaps as much as one-third of the U.S. population will be retired and wondering what to do next." (Richard Behar, "Floating resorts", Forbes, January 26, 1987) In 1977 some 715,000 passengers took cruises marketed in North America, which accounted for almost 90% of the worldwide business. By 1985 the number had tripled, with some 65% headed to the Caribbean. Compounded growth rate is about 10% yearly. This is a capital-sensitive business in which 80% occupancy rates are often needed just to break even, according to Shikhar Ghosh of the Boston Consulting Group. Currently, price discounting is heavy in the industry. Group rate discounts are usually 20% of the regular price and are enjoyed by 40% of all travelers. Most consumers spend no more than \$1000.00 for a seven-night cruise - all inclusive! Marketing ideas such as those of Bruce Nierenberg, executive vice president of Premier Cruise Lines, to tie short cruises on his S.S. Royale or S.S. Oceanic with three days at the Walt Disney World Magic Kingdom and Epcot Center have proved to be an outstanding bit of fresh, new promotion. In addition, he feels that the painting of his ship's hulls red, something that made traditionalists shudder - has also helped the new line sell tickets. The Royal Cruise Line initiated a successful new program whereby reservations are offered for next year's cruises at this year's prices for only a small down payment. William Smith, vice president for marketing for Sitmar Cruises, said that 70% of his business is from repeat passengers. His marketing approach includes the important feedback of his passengers, as well as the line's responsiveness to their immediate wants. The issues of

flexibility and timeliness cannot be overstated in this business. The old traditional ocean liner method of doing business may, in fact, not be the solution to the new cruise ship passenger requirements. According to Braynard,

"By 1969...totals had dropped to 335,131 passengers on 1001 crossings. This was the last year there was an American-flag liner in trans-Atlantic service--the superliner United States. People sail on ships today because they want to, not because they have to! And the turn of the century, only a dozen years away, will see at least 4,000,000 people making cruises on overnight passenger ships in and out of America. Let it not be mistaken, there is a boom in ocean passenger shipping and no one can deny it. Survey after survey has shown that only a small proportion of the people questioned have ever taken a cruise but that a very large proportion want to. The young people of America believe wholeheartedly that there is a cruise in their future. And those who have taken one cruise will quickly become the repeaters so many lines proudly boast about."

Robert H. Kickerson, senior vice president for sales and marketing of Carnival Cruise Line predicts a vast potential for growth with the American market. "For one thing, Americans are fed up with traffic. Travel by car is often a horror. With gridlocks in each city, hour delays at every bridge or tunnel, the road is becoming a nightmare. With cruise ships you are at your all-inclusive resort when you cross the gangplank."

Ship travel is more and more becoming a lure for the very big American public. New ideas in marketing, new ship types and the fresh approach due to new money and new top management are everywhere. In summary of a long list of facts and statistics, Mr. Braynard states, "Ships are coming back, and the cruising business is one of the fastest growing, highest potential industries in the world". The era of the Cruise Ship is here. The

time for innovative, imaginative, and industrious industry leaders is now. Opportunity is the challenge: Initiative is the password!

San Diego passenger count peaked at just over 100,000 in 1985 then fell to half that number the following year when a major servicing vessel left the market. The count since has risen steadily back to the 100,000 mark. In addition to compiling the passenger figures, the San Diego Cruise Industry Consortium has recorded hundreds of statistics regarding the local industry. In 1985 the Princess Cruise Line pulled the Pacific Princess out of San Diego, not because the business was poor, but, because the company needed a better balance of offerings in the Caribbean. Since the departure of The Love Boat, San Diego has reclaimed many passengers while the number of visiting vessels has increased from 10 in 1985 to 15 in 1992 and the number of port calls increased from 276 to 388 respectively. So, while Los Angeles retains its grip on the major cruise lines and can boost greater numbers of passengers, San Diego is quietly advancing her lines by taking advantage of the local attractions and packaging them with cruise line offerings. San Diego is hungry for homeported cruise ships who will not only provide passenger and crew spending on the local economy but will generate spending in the multiple tiers of resupply, repair, and refueling areas as well.

Currently there are two homeported vessels in San Diego and both are in the one day shuttle business. California Crusin' has grown at a rate of 20% per month since opening five years ago

according to Steve Lambert, vice president and general manager of the company. In addition, they will be replacing the current 300 passenger catamarans with larger 360 passenger catamarans in order to provide a more stable ride as well as to increase passenger capacity and service areas.

In the October 2, 1988 issue of The San Diego Union, staff writer Diane Lindquist reported "The Cruise Consortium last spring lured the S.S. Bermuda Star, a New Jersey based, 700-passenger ship, to establish San Diego as its home port for 13 weeks of cruises to the Mexican Riviera." In November of 1988, the Bermuda Star Line sent the ship back for a doubled 26-week itinerary. Lindquist continues, "Cruise Industry News, the industry's major magazine, ranks San Diego as the 11th-busiest cruise terminal in North America. That puts it ahead of Boston and San Francisco but behind Miami, Los Angeles and Vancouver". San Diego should break into the top 10 in the next year or so according to the Cruise Consortium public relations executive Don Harrison.

Local port facilities were recently renovated at a cost of several million dollars, the terminal and pier improvements were intended to be a temporary fix. Only one ship can dock at a time and only on the north side of the dock. Continued improvements are underway and due to be completed soon. San Diego Unified Port District Commission is pleased with the growth of the cruise industry in San Diego, and has expressed a willingness to consider developing additional docking facilities at the end of the pier or on its southern side.

Al Reese, vice president of the Convention & Visitors Bu-

reau, comments on an aspect of the industry's contribution to the community in saying "I think the cruise ships really are a civic amenity, they add to the decor of the skyline and add to the pizzazz of the port". Sunset Cruises will be touted as a valuable addition to the Port of San Diego as the only U.S. flagged cruise ship operating in the Southern California waters. The presence of Sunset Cruises in a city that is homeport for a significant portion of the United States Pacific Fleet is a fitting tribute to the City of San Diego.

## MARKET ANALYSIS

The recreation market is host to the cruise ship market; however, competition for the recreation dollar starts with the consumer's disposable income and his priorities. Therefore, recognition of the larger competition is essential, and a designed market strategy is necessary to sell the cruise over all other available uses for the disposable income. Specifically, the income normally intended for recreation must be narrowed to the cruise vacation. The mini-cruise ship market specifically targets the consumer who wants an affordable cruise that encompasses their specific entertainment and recreation desires, yet is unencumbered by expensive frills and embellishments. The young, newly married, retired, and novice cruise traveler couples are the direct markets. Specific "theme" and "convention" cruises will be established to target other lucrative markets. The competitive advantage will be the short term aspect of the cruise which allows the cruise to fit into the business, travel, and personal schedules of more people.

## COMPETITION

The cruise market is divided into four major categories of cruise duration. The one day trip, the sub-week trip, 7-14 day cruise, and the long duration cruises over 2 weeks long. Each category is targeted and marketed differently. Sunset will



pursue the sub-week cruise market--the fastest growing market in the industry. The sub-week cruises are further divided into two cruise combinations, the 2 and 5 day trips and the 3 and 4 day trips. The difference is the distance to be covered on the trip. The 2/5 trip uses the longer period to extend the cruise further into the Mexican waters while using the shorter period to fill the cruise requirements of the weekend vacationers. The disadvantage to this combination is that the longer trip competes directly with the larger ships while trying to sustain the expense of the extended underway operation. Sunset will operate on the 3/4 day schedule which will allow operations to be directed at their niche; that is, going where the competition can't go and offering the first time passenger the opportunity to experience a short and affordable cruise and the veteran passenger the experience of visiting smaller ports, coves, and beach landings.

According to the San Diego Convention and Visitors Bureau, San Diegans took cruise ships during the past five years at a rate of 9.9% of all households in San Diego or 80,100 passengers. Of those trips 29% were for periods of less than 7 days. Boarding locations were primarily divided between Miami, Los Angeles, and San Diego at about 30% each with the remaining ports of embarkation being throughout the world. The final destinations were Mexico (38%), Caribbean(31%), Alaska (11%), and all other ports. The cruise ship travelers' profile is a 51 year old who earns \$39,600 a year; has 16.3 years of education; is probably a professional, technical, managerial, or retired person who is married and has no children in the household.

The San Diego market is currently served by both Los Angeles and San Diego ports. The ships currently operating out of Los Angeles are foreign flagged and can not take on passengers in consecutive U.S. ports; therefore, San Diego passengers must board in Los Angeles and "visit" San Diego as one of their ports of call. There are two ships currently operating out of Los Angeles on the sub-week schedule. The Norwegian Cruise Line operates the M.S. Southward between the ports of Los Angeles, San Diego, Ensenada, and Catalina. The Southward is a 16,000 ton vessel with a passenger capacity of 750. The Southward is currently operating at or near 100% of capacity. Admiral Cruises offers the same schedule from Los Angeles and has the same foreign flag restrictions. The Bermuda Star Line offers a San Diego based seven day cruise into Mexico beginning in November and continuing through April. The Bermuda Star is in San Diego only six months each year and operates a seven day cruise schedule into Mexican ports only.

There are two other cruise offerings in the San Diego area and both are one day shuttles; nonetheless, they have been considered in the analysis of the market and are viewed as competition for the market in San Diego. California Cruisin' operates a catamaran service between San Diego and Catalina. Ensenada Express offers a one day trip to Ensenada. Both companies have been considered as potential competitors in the San Diego market; however, the passenger who is shopping for a cruise will differentiate between the one day shuttle and the Sunset Cruises mini-cruise. The difference will be part of the market targeting and advertising.

There are several other vessels operating in the San Diego area that provide one day trips; however, these are primarily fishing vessels offering specific charter trips.

#### MARKETING STRATEGY

The overall strategy is to sell a "feeling" of a vacation cruise at an affordable price both in terms of money and time. The key to the strategy is not to emphasize the low price; rather, it is to promote an opportunity to enjoy a carefree well deserved and affordable cruise vacation which might otherwise be beyond the scope of reality due to the perceptions of what a cruise entails. In other words, Sunset should appeal to those who have the resources to cruise but lack motivation to take the first step.

The seasonal offerings should attract those who are seeking relief from the elements. Mutually supporting agreements between U.S. rail and air carriers and Sunset Cruises is being pursued and could provide substantial expansion of the market area. Passengers will travel from the inclement winter weather and cruise in the more favorable weather of San Diego for one price. The desert communities will have the same benefit during the summer months. These will be seven day packages combining a 3 or 4 day cruise with the San Diego Zoo, Sea World, Old Town and Sea Port Village. The San Diego Convention and Visitors Bureau has offered to assist in preparing the package offerings. The San Diego Cruise Industry Consortium has provided a substantial

amount of assistance already. Conventioneers who are looking for a break in the monotonous schedule of events are an excellent source of potential passengers. The vessel itself can become the convention center for meetings of up to 70 people for a cost that would be very competitive with the hotels and convention centers. The setting for managerial "retreats" is superb. Again, the per diem cost to the organizer is very competitive with the major hotels. Sunset can offer a superior facility and a lower price, considering the total cost of the convention, (i.e. hotel, meals, entertainment, conference room, and refreshments). By offering a short, affordable cruise and providing personal attentive service, the market can be expanded through repeat business and references. By grooming a clientele of special events coordinators at the prominent hotels and resorts, the cruise can become a provision of the convention service and the conventioneers can become a new and almost unlimited market. The short duration and modest cost can be attractive to both the conventioneers and their spouses as a highlight event of their convention. Sunset has discussed arrangements with two convention organizers to provide a dedicated vessel on a regular basis.

The beauty of the strategy is that rather than compete head-on with the larger Lines and attempt to capture a portion of their market share, Sunset is identifying and targeting a portion of the market not yet serviced by existing lines. Sunset will cruise where the larger lines can't; thereby offering the passenger something unique as well as precluding market encroachment by the larger ships in the future. As the economy strengthens, the potential market increases and Sunset is a likely first cruise

venture for the new arrivals in the potential market. An additional feature is that as economic belts tightens, the passengers of the larger lines may choose to reduce costs by not traveling or by traveling shorter cruises closer to home. Sunset will be well positioned to capture consumers who are "retreating" on a declining economy.

#### PRICING

The pricing policy will be to offer an assortment of cabin prices based on the accommodations but not on a difference of on-deck services. The price would be essentially stable except for seasonal adjustment necessary to promote off-season sales. Discounting will be offered to group sales and on occasion to "name" travelers who can raise the occupancy level and promote the profit line. In no case will the discounted price fall below cost plus ten percent.

#### TICKET SALES

The preferred method for ticketing will be direct sales through a central business/ticketing office; however, public ticketing services such as Ticketron will be used. Due to the high cost of their services, travel agents are the last resort for ticket offerings. Maximum use of Visa, Mastercharge, American Express, and Discover Cards will be made in order to secure the immediate sale. Regional sales promotions will be followed

by direct sales. The regional sales campaigns will be designed around the seasons. Summer ticket offerings will be directed at the desert communities while winter passage will be directed at the "snowbird". Local markets will be addressed through local media and sought to fill the remaining spaces. Various promotions and campaigns will be used to prompt the last minute traveler. Special "theme" cruises will be used to promote travel during projected lulls in the travel season. Holiday travel will also be promoted as a special event.

### INVESTMENT ANALYSIS

Sunset is seeking a return on investment of at least 5% annually over a period of five years (years during which capital debt is carried). The in-service ship after conversion, should be valued at about \$4.5 million, and will be offered as collateral. The offering is for convertible debentures; however, conversion of more than 49% is not offered. Ideally there will be no conversion, and the debt will be satisfied at the end of a sixty month period.

### USE OF PROCEEDS

|                                 |               |
|---------------------------------|---------------|
| Purchase of Vessel. . . . .     | \$3.7 million |
| Initial Capital Expenditures. . | \$200,000     |
| Operating Capital Escrow. . . . | .\$450,000    |

The vessel currently being considered will be bid at \$3.7 million. The cost of conversion and start-up is estimated at \$200,000 plus the value of three months operating expenses of \$450,000. The total requirement for startup will be \$4,350,000 of which \$3,900,000 would be required immediately and the balance of 450,000 would be held in escrow as a line of credit. The estimated value of the completed vessel is 4.5 million. There

will be no other major equipment purchased or leased during the startup of the business. The conversion and startup costs include everything required for the first day of business.

Appendix A is a summation of the costs and associated variables as proposed. Appendix B is an analysis of the breakeven points and performance requirements displayed to indicate feasibility at different levels of patronage under the given variables.

The annual projection based on realistic estimates and requirements is displayed in Appendix A. The elasticity of the price and the market saturation are such that 100% occupancy is judged to be a valid assumption. There is no chance to capture any more of the market than the 125 passengers per cruise due to the physical limitations of the ship. However, ancillary services such as tours, ship store sales, bar sales, casino operations, and travel services provide for substantial growth potential; again however, for the purpose of this study, their contribution was not considered as an income to the venture.

The breakeven point depends on the variables of number of passengers per trip, ticket price, and the number of trips per month. Appendix B shows a chart of the breakeven point for a given set of likely variables at increasing levels of occupancy over the course of a one year projection. Under these given variables, the breakeven point never occurs.



## SUMMARY AND CONCLUSIONS

In summary, this project has much merit and potential; however, the issues of financing and operational costs create concern for the survivability of the venture in a competitive market. As stated throughout the study, Sunset is proposed to be a U.S. flag carrier with all the attendant restrictions and precious few incentives. The cost of U.S. investment capital in terms of interest or in converted debentures is very high as opposed to foreign loans or investors' demands. Current guarantee requirements of the U.S. loan market are such that in the absence of a "golden goose" guarantor, credit insurance drives the actual cost of the loan up by at least three points--payable monthly for the life of the loan. Offshore financing would substantially increase the viability of this venture. A second area of concern is the payroll expenses. The deck and engineer crew requirements under the U.S. flag are stringent and the requirement of a U.S. flagged vessel is that seventy-five percent of the crew must be natural or naturalized citizens and the balance must have a "green card" work permit. Along with the enhanced crew and citizenship/work permit requirements comes the costs of base pay at the U.S. rate, social security contributions, unemployment compensation contributions, workman's compensation contributions, and the standard package of benefits as dictated by the current labor agreements. Perhaps the most dreaded aspect of the U.S. crew ought to be the probing eyes of

the Internal Revenue Service--not in terms of being caught intentionally avoiding the law, rather, in terms of just monitoring the laws as they change and complying with the myriad of requirements. Available offshore flagging requires no payroll or personnel criterion compliance. In summation, the cost of payroll is triple that of the competition flying foreign flags of convenience.

New construction was considered briefly but rejected for the following reasons. First, new construction, for a small venture like this is prohibitively expensive. Perhaps some foreign yards--particularly European--could deliver a vessel at thirty to forty percent less but the advantages of U.S. flagging would be forfeited as a result. Under the current policies of subsidies and laws of the United States, new construction is not a feasible option under any conditions in this venture. The only possible solution would be a financing/tax incentive for new construction and U.S. service to bring life to this concept.

Having given consideration to the mandated standards of performance requirements and the analysis of the financial projections, I would judge this project as not feasible. The requirements of the U.S. flagging policy necessitates burdensome costs associated with modifications, crewing, scheduling, and most restricting, financing and investing. The marketing program, the company structure, and the growth strategy are all sound in practice and lay the foundation for a viable venture; however, the entrepreneur's insistence on flagging the vessel U.S. is the single debilitating factor in this finding of not feasible.

This unfeasibility of this project is a reflection of the entire maritime industry--the current climate does not support ventures in the industry. The impact on national security is again best stated by Alfred Thayer Mahan who wrote "Sea power in the broad sense...includes not only the military strength afloat that rules the sea or any part of it by force of arms, but also the peaceful commerce and shipping from which alone a military fleet naturally and healthfully springs, and on which it securely rests." The impact of successful maritime businesses is, in fact, of importance to national security. The contribution of a minor passenger vessel to national security may appear vague; however, when viewed as a microcosm of the industry, the importance of this network of businesses which comprise the maritime industry, becomes well focused. The unfeasibility of a project such as this is a warning of a threat to one of our national assets and to our national security.

|                         | JAN     | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    | OCT    | NOV    | DEC    | TOTAL   | AVERAGE |
|-------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| PASSENGERS              | 90      | 100    | 110    | 110    | 125    | 125    | 125    | 125    | 125    | 125    | 115    | 125    | 1400    | 117     |
| TICKET PRICE            | 325     | 325    | 350    | 350    | 350    | 350    | 375    | 375    | 375    | 375    | 375    | 350    | 4275    | 356     |
| CRUISE DAYS             | 4       | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      |         |         |
| CRUISES PER MONTH       | 4       | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 92      |         |
| FIXED EXPENSES          |         |        |        |        |        |        |        |        |        |        |        |        |         |         |
| LOAN REPAYMENT          | 114270  | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 114270 | 1371245 | 114270  |
| OPERATING RESERVE       | 5000    | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 60000   | 5000    |
| INSURANCE               | 8000    | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 96000   | 8000    |
| LICENSE                 | 100     | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 1200    | 100     |
| FMC BOND                | 0       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0       | 0       |
| MANAGEMENT              | 15000   | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 15000  | 180000  | 15000   |
| CAPTAIN                 | 5500    | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   | 66000   | 5500    |
| FIRST MATE              | 3500    | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 3500   | 42000   | 3500    |
| ENGINEER                | 3000    | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 36000   | 3000    |
| CHIEF COOK              | 3000    | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 3000   | 36000   | 3000    |
| DEPRECIATION            | 10000   | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 120000  | 10000   |
| TOTAL FIXED EXPENSES    | 167370  | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 167370 | 2008445 | 167370  |
| VARIABLE EXPENSES       |         |        |        |        |        |        |        |        |        |        |        |        |         |         |
| CREW                    | 36000   | 40000  | 41000  | 41000  | 50000  | 50000  | 50000  | 50000  | 50000  | 50000  | 46000  | 50000  | 560000  | 46567   |
| LAUNDRY                 | 2880    | 6400   | 7040   | 7040   | 8000   | 8000   | 8000   | 8000   | 8000   | 8000   | 7360   | 8000   | 86720   | 7227    |
| FOOD, PASSENGERS        | 14400   | 32000  | 35200  | 35200  | 40000  | 40000  | 40000  | 40000  | 40000  | 40000  | 36800  | 40000  | 436600  | 36133   |
| FOOD, CREW              | 3600    | 8000   | 8800   | 8800   | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 9200   | 10000  | 108400  | 9033    |
| FUEL, PROPULSION        | 3600    | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 7200   | 82800   | 6900    |
| FUEL, GENERATORS        | 5760    | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 11520  | 132480  | 11040   |
| LUBRICANTS              | 702     | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 1404   | 16146   | 1346    |
| TERMINAL FEES           | 480     | 960    | 960    | 960    | 960    | 960    | 960    | 960    | 960    | 960    | 960    | 960    | 11040   | 920     |
| ADVERTISING             | 1800    | 2000   | 2200   | 2200   | 2500   | 2500   | 2500   | 2500   | 2500   | 2500   | 2300   | 2500   | 28000   | 2333    |
| REFRESHMENTS            | 720     | 1600   | 1760   | 1760   | 2000   | 2000   | 2000   | 2000   | 2000   | 2000   | 1840   | 2000   | 21680   | 1807    |
| ENTERTAINMENT           | 5000    | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 10000  | 115000  | 9583    |
| GRATUITIES              | 1800    | 4000   | 4400   | 4400   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 4600   | 5000   | 54200   | 4517    |
| COMMISSIONS             | 3510    | 7800   | 9240   | 9240   | 10500  | 10500  | 11250  | 11250  | 11250  | 11250  | 10350  | 10500  | 116640  | 9720    |
| MAINTENANCE             | 4500    | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 4500   | 54000   | 4500    |
| ENGINEER                | 5000    | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 5000   | 60000   | 5000    |
| DECK                    | 4000    | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 4000   | 48000   | 4000    |
| HOTEL                   | 500     | 500    | 500    | 500    | 500    | 500    | 500    | 500    | 500    | 500    | 500    | 500    | 6000    | 500     |
| SHORE SUP               |         |        |        |        |        |        |        |        |        |        |        |        |         |         |
| TOTAL VARIABLE EXPENSES | 94252   | 146884 | 157724 | 157724 | 173084 | 173084 | 173084 | 173084 | 173084 | 173084 | 163534 | 173084 | 1934706 | 161226  |
| MONTHLY SUMMARY         |         |        |        |        |        |        |        |        |        |        |        |        |         |         |
| TICKET SALES            | 117000  | 260000 | 308000 | 308000 | 350000 | 350000 | 375000 | 375000 | 375000 | 375000 | 345000 | 350000 | 3888000 | 324000  |
| EXPENSES                | 261622  | 314254 | 325094 | 325094 | 340454 | 340454 | 341204 | 341204 | 341204 | 341204 | 330904 | 340454 | 3943151 | 328596  |
| GROSS                   | -144622 | -54254 | -17094 | -17094 | 9546   | 9546   | 33796  | 33796  | 33796  | 33796  | 14096  | 9546   | -55151  | -4596   |
| TAXES                   | 0       | 0      | 0      | 0      | 2386   | 2386   | 8449   | 8449   | 8449   | 8449   | 3524   | 2386   | 44479   | 3707    |
| PROFIT/LOSS             | -144622 | -54254 | -17094 | -17094 | 7159   | 7159   | 25347  | 25347  | 25347  | 25347  | 10572  | 7159   | -99630  | -8302   |
|                         | JAN     | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    | OCT    | NOV    | DEC    | TOTAL   | AVERAGE |

APPENDIX A

| BREAK-EVEN<br>DISCOUNT<br>INCREMENT | TICKETS | JAN    | FEB    | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC   | TOTAL |
|-------------------------------------|---------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                     | 70      | -37419 | -11024 | -8968 | -8968 | -8537 | -8537 | -6840 | -6840 | -6840 | -6840 | -7114 | -8537 | 70    |
|                                     | 73      | -37230 | -10599 | -8455 | -8455 | -8006 | -8006 | -6236 | -6236 | -6236 | -6236 | -6522 | -8006 | 73    |
|                                     | 76      | -37040 | -10175 | -7943 | -7943 | -7476 | -7476 | -5633 | -5633 | -5633 | -5633 | -5931 | -7476 | 76    |
|                                     | 79      | -36851 | -9751  | -7431 | -7431 | -6945 | -6945 | -5029 | -5029 | -5029 | -5029 | -5339 | -6945 | 79    |
|                                     | 82      | -36661 | -9327  | -6918 | -6918 | -6414 | -6414 | -4426 | -4426 | -4426 | -4426 | -4747 | -6414 | 82    |
|                                     | 85      | -36472 | -8903  | -6406 | -6406 | -5883 | -5883 | -3822 | -3822 | -3822 | -3822 | -4155 | -5883 | 85    |
|                                     | 88      | -36282 | -8479  | -5894 | -5894 | -5353 | -5353 | -3219 | -3219 | -3219 | -3219 | -3564 | -5353 | 88    |
|                                     | 91      | -36092 | -8054  | -5381 | -5381 | -4822 | -4822 | -2615 | -2615 | -2615 | -2615 | -2972 | -4822 | 91    |
|                                     | 94      | -35903 | -7630  | -4863 | -4863 | -4291 | -4291 | -2012 | -2012 | -2012 | -2012 | -2380 | -4291 | 94    |
|                                     | 97      | -35713 | -7206  | -4357 | -4357 | -3760 | -3760 | -1408 | -1408 | -1408 | -1408 | -1788 | -3760 | 97    |
|                                     | 100     | -35524 | -6782  | -3844 | -3844 | -3230 | -3230 | -805  | -805  | -805  | -805  | -1197 | -3230 | 100   |
|                                     | 103     | -35334 | -6358  | -3332 | -3332 | -2699 | -2699 | -201  | -201  | -201  | -201  | -605  | -2699 | 103   |
|                                     | 106     | -35145 | -5933  | -2820 | -2820 | -2168 | -2168 | -402  | -402  | -402  | -402  | -13   | -2168 | 106   |
|                                     | 109     | -34955 | -5509  | -2308 | -2308 | -1637 | -1637 | 1006  | 1006  | 1006  | 1006  | 578   | -1637 | 109   |
|                                     | 112     | -34765 | -5085  | -1795 | -1795 | -1107 | -1107 | 1609  | 1609  | 1609  | 1609  | 1170  | -1107 | 112   |
|                                     | 115     | -34576 | -4661  | -1283 | -1283 | -576  | -576  | 2213  | 2213  | 2213  | 2213  | 1762  | -576  | 115   |
|                                     | 118     | -34386 | -4237  | -771  | -771  | -45   | -45   | 2816  | 2816  | 2816  | 2816  | 2354  | -45   | 118   |
|                                     | 121     | -34197 | -3813  | -258  | -258  | 486   | 486   | 3420  | 3420  | 3420  | 3420  | 2945  | 486   | 121   |
|                                     | 124     | -34007 | -3388  | 254   | 254   | 1016  | 1016  | 4023  | 4023  | 4023  | 4023  | 3537  | 1016  | 124   |
|                                     | 127     | -33818 | -2964  | 766   | 766   | 1547  | 1547  | 4627  | 4627  | 4627  | 4627  | 4129  | 1547  | 127   |
|                                     | 130     | -33628 | -2540  | 1279  | 1279  | 2078  | 2078  | 5230  | 5230  | 5230  | 5230  | 4721  | 2078  | 130   |

| TICKETS | PROFIT/LOSS (PER MONTH) | PROFIT/LOSS (PER CRUISE) |
|---------|-------------------------|--------------------------|
| 70      | -149678                 | -88189                   |
| 73      | -148919                 | -84796                   |
| 76      | -148161                 | -81402                   |
| 79      | -147403                 | -78009                   |
| 82      | -146644                 | -74615                   |
| 85      | -145886                 | -71222                   |
| 88      | -145128                 | -67828                   |
| 91      | -144370                 | -64435                   |
| 94      | -143611                 | -61041                   |
| 97      | -142853                 | -57648                   |
| 100     | -142095                 | -54254                   |
| 103     | -141337                 | -50861                   |
| 106     | -140578                 | -47467                   |
| 109     | -139820                 | -44074                   |
| 112     | -139062                 | -40681                   |
| 115     | -138304                 | -37287                   |
| 118     | -137545                 | -33894                   |
| 121     | -136787                 | -30500                   |
| 124     | -136029                 | -27107                   |
| 127     | -135270                 | -23713                   |
| 130     | -134512                 | -20320                   |

# APPENDIX B

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